Anthony Agresta is a research demographer at PRB.

The Turnaround's Turnaround

The onset of the Eighties appears to have marked an end to the Turnaround. Between 1980 and 1982 metropolitan areas gained almost 4.1 million inhabitants in contrast with the nonmetropolitan areas' increase of 1 million. Table 1 compares metro and nonmetro average annual percent changes for two periods. While nonmetropolitan America grew at an average rate of 1.34 percent annually in the 1970s, this has dropped substantially to 0.83 percent between 1980 and 1982. The South and West continue to grow at a much faster pace. Although the data do not depict across-the-board decreases in nonmetro growth (nonmetro growth in the West South Central did experience a slight increase between the two periods), the results indicate a slowing of nonmetropolitan growth and the revival of metropolitan area growth in the 1980s. Those leaving metro areas for nonmetro areas are classified as in-migrants, while out-migrants are defined as those leaving nonmetro areas for metro areas. By subtracting the out-migration rate from the in-migration rate the net migration rate is computed. The nonmetropolitan population at the end of the interval serves as the denominator for both rates. Ideally, a base population at the beginning of the interval would be used, but when computing for a period as short as one year, using end of the interval figures should not result in any significant change. Positive net rates indicate a preponderance of migrants from metro areas over those leaving nonmetro areas (more in-migrants than out-migrants).

Leaving the Metropolis

Differences in net migration rates between the periods is a likely explanation for the changes in growth patterns. A comparison of net migration rates for a one year interval in the middle of the Migration Turnaround (1975-1976) and rates for an interval in the early 1980s (1982-1983) clearly shows that the flow of migrants to rural America is not as strong in the early 1980s as it was during the Turnaround. Table 2 provides this comparison, showing that net migration rates for the mid-year interval of the Migration Turnaround indicate a net movement of migrants to nonmetropolitan areas. This is true for both males and females except those age 16 to 24.

The picture of metropolitan mobility changed dramatically by the early 1980s. By 1982-1983, a near balance of people migrating between metro and nonmetro areas had occurred. The Migration Turnaround may have been a phenomenon restricted to the 1970s. If indications of its presence still exist today, it is safe to say that the phenomenon is past its heyday.

Whether or not metropolitan areas will grow at a faster pace through the remaining years of this decade is not known. In any case, the ramifications of augmented metropolitan growth are potentially significant ones. Because of this, the need to monitor the urbanization or ruralization of the United States will always be of great concern to demographers. □

Table 2:
Net Migration Rates per 1,000 Population by Age and Sex for Nonmetropolitan Areas of the United States, 1982-83 and 1975-76

	Males		Females	
Age	1982-83	1975-76	1982-83	1975-76
16-24	−10.99	−8.21	−18.08	−12.47
25-34	+2.43	+20.10	+0.35	+11.22
35-44	+4.12	+6.69	−1.55	+5.24
45-64	+5.07	+9.07	+2.30	+9.73
65+	−0.14	+9.10	+1.11	+4.85

Source. Series P-20, No. 393, Geographic Mobility: March 1982-March 1983 and Series P-20. No. 305, Geographic Mobility: March 1975-March 1976.
Note. Both of these volumes use the 1970 Census Bureau definition of SMSA.

FOOTNOTES

1. As of June 30, 1983 the Office of Management and Budget redefined metropolitan criteria. The term SMSA was changed to MSA (Metropolitan Statistical Area) with different standards applying. For explanation of these criteria see Richard L. Forstall and Maria Elena Gonzalez, "Twenty Questions: What You Should Know About the New Metropolitan Areas," in *American Demographics,* April 1984.

2. Census of the Population: 1970, Volume 1, Characteristics of the Population. Part A *Number of Inhabitants.* Washington D.C.: U.S. Government Printing Office, 1972, pp. xii-xiii.

3. Linda L. Swanson and Calvin L. Beale, "Patterns and Variations of the Flow of Metropolitan Migrants to Nonmetropolitan Counties, 1975-1980," Economic Research Service Publication, Washington, D.C.: U.S. Dept. of Agriculture, 1983, pp. 4-6.

World Food News

Continued from Page 2

Outrunning Food-Producing Capacity

As the FAO study shows, however, if food remains in the country where it was produced, the picture completely changes; in 2000, 14 percent of the LDCs' projected total population (excluding China) exceeds the projected food potentials of their countries. (See Table 2, page 9.)

As the table shows, Southwest Asia is the region where population growth is projected most likely to outrun the food-producing capacity of the region's countries. Even with high agricultural input, a sixth of the projected 2000 population growth would have to be fed from other sources. Africa and Southeast Asia populations will also exceed the physical supporting capacity of their land unless agricultural inputs are increased; if they are, however, the table shows that improvement can be major.

In the LDCs, 36 percent of the potentially cultivable land was already in use in 1975 (by contrast, 77 percent is the figure for the more developed countries). That figure, however, varies from country to country and region to region; 92 percent of the potentially cultivable land in Southeast Asia is already in use, for example, while the figure for South America is only 15 percent.

About 22 percent (11.6 million sq. miles) of the earth's land surface is considered cultivable; of this, about half needs improvement before it can be used; flooded areas drained, arid areas irrigated, with costs and the availability of capital for such an undertaking a big question mark.

"By the end of the century," the report concludes, "shortage of land will have become a critical constraint for about two-thirds of the population of the developing countries." Between 1980 and 2000, the amount of arable land available in those countries will fall from 0.37 to 0.25 hectares (0.91 to 0.62 acres) per capita.

The "Potential"/"Actual" Paradox

Nevertheless, the report concludes that agricultural production could be doubled in the LDCs by the end of the century. If so, malnutrition would be greatly reduced, though still not eliminated. About 14 percent of the increase would have to come from cropping land more often, 60 percent from improving yields, and 25 percent from bringing 150 million hectares (370 million acres) of new arable land into production. This means increasing the area of cultivated land by 20 percent.

How can a study which concludes that there is enough land to feed world population be called "grave" by some observers? Simply because of the alarming mismatch between the world's population and its best agricultural land. This, combined with poverty and strained Third World economies, appears to make the mere existence of sufficient land irrelevant.

The bottom line of the FAO report is that bringing the majority of the world's land under cultivation and raising agricultural investment and technology, while daunting enough tasks, are by themselves insufficient to alleviate hunger. Some very low-tech regions of the world will not be self-sufficient in food in the foreseeable

continued on next page

Table 1:
Projected or Estimated Population-Supporting Ratios by LDC Region

(Figure indicates the number of times by which the potential carrying capacity of the land exceeds the actual or expected population.)

Agricul. input*	Africa	Asia	SW Asia	South Amer.	Cen. Amer.	Total
1975: All cultivable land under food crops						
Low	2.7	1.1	**0.8**	5.9	1.6	2.0
Int.	10.8	3.0	1.3	23.9	4.2	6.8
High	31.6	5.1	2.0	57.2	11.5	16.3
1975: Actually cultivated land, one-third under nonfood crops						
Low	**0.4**	**0.7**	**0.8**	0.6	0.5	0.4
Int.	1.5	1.9	1.2	2.4	1.3	1.5
High	4.5	3.1	1.9	5.8	3.7	3.6
2000: All cultivable land under food crops						
Low	1.5	1.1	**0.7**	3.5	1.4	1.5
Int.	5.4	2.3	**0.9**	13.3	2.6	4.1
High	15.6	3.3	1.2	31.5	6.0	9.1

Source. Table compiled in Earthwatch No. 13, 1984, "Land and People, the Growing Pressure," by Paul Harrison, from the FAO study, *Potential Population Supporting Capacities of Lands in the Developing World.*

*"For the purpose of the study, low agricultural inputs correspond to primitive subsistence farming such as found in most of Africa and large parts of Asia [hand labor, few modern resources]; intermediate inputs add some basic fertilizers, mechanization, and conservation measures as in development project areas; and high inputs imply the heavily mechanized agriculture of North America with large fertilizer doses, and ideal crop mix.

Portion of a map prepared from the FAO study assessing the potential population-supporting capacities of LDC lands, given low levels of agricultural input. The diagonal-line areas ▨ are those where population already exceeds the potential capacity of the intra-country land to support them. See text for details.

World Food News

Continued from preceding page

Table 2:
Projected 2000 Populations of LDCs (Excluding China) That Exceed the Projected Food Potentials of Their Countries – in Millions

(Percentages of regional populations that fall into the category are given in parentheses.)

Agricul. input*	Africa	SW Asia	South Amer.	Cen. Amer.	SE Asia	Total
Low	256.8 (32.9)	107.6 (40.7)	0 (0)	18.0 (8.4)	70.7 (3.7)	503.1 (14.0)
Int	48.2 (6.2)	78.5 (29.7)	0 (0)	6.9 (3.2)	7.7 (0.4)	141.3 (3.9)
High	2.3 (0.3)	41.9 (15.8)	0 (0)	0.5 (0.2)	3.1 (0.2)	47.8 (1.3)

Source: Summary data from tables 3.4 and 3.5, *Potential Population.*

*See Table 1 footnote for detailed definitions of agricultural input levels.

future. For their populations to be fed will require a level of international cooperation, trade, and foresight very different from today's world.

It is heartening that the potential for a decently fed world population exists. But to hope that this potential will effortlessly happen is fallacious. And the implication of the FAO's study (that "potential" does not necessarily convert to "actual") should not be branded as "pessimistic." Instead it should be considered realistic. □

The report is *Potential Population Supporting Capacities of Lands in the Developing World*, by G.M. Higgins, A.H. Kassam, and L. Naiken, Food and Agriculture Organization of the UN, and G. Fischer and M.M. Shah, International Institute for Applied Systems Analysis. Technical Report of Project INT/75/P13. Dated 1982 but published 1984.

New Strategies Against Water Scarcity

The world's most precious commodity, fresh water, is growing increasingly scarce due to widespread overuse and mismanagement, according to the most recent *Worldwatch Paper*. If current trends continue, lake and river quality will deteriorate, groundwater supplies will decrease, and fresh water shortages may restrict food production and economic growth, reports Sandra Postel, author of the report, "Water: Rethinking Management in an Age of Scarcity."

Globally, fresh water supplies are abundant. Postel maintains that "the volume of fresh water naturally renewed each year could meet the material needs of 5-10 times the existing world population." But those regions with the most water often are not those which need it most, and demands in many water-short regions are rising rapidly. A shortage of expected rainfall can contribute to a drought, as evidenced in much of Africa today. But other supplies of water, such as underground aquifers and inland lakes and seas, are currently being overused or mismanaged, endangering future water supplies.

In the Third World, failure to replant denuded hillsides accelerates runoff, flooding, and soil erosion. "Though impossible to quantify, deforestation may be diminishing the Third World's dependable water supply by as much as expensive new dams and reservoirs are augmenting it," Postel says.

Governments continue to bank on more large dams and river diversions to relieve regional water shortages, according to the report. But high economic and environmental costs now make these ventures risky.

Despite emerging constraints, policies in most nations continue to promote waste and inefficiency. Conservation, typically viewed as a short-term strategy for dealing with droughts and other emergencies, offers greater benefits as a long-term option comparable to drilling a new well or building a new reservoir, Postel says. The report calls for new strategies such as conservation and better management, to prevent future emergency situations as the world's population, and thus water demands, grows. □

Copies of *Worldwatch Paper 62*, "Water: Rethinking Management In an Age of Scarcity," by Sandra Postel, are available from PRB. Single copies are $4.00 each; 2-5 copies, $3.00 each; 6-20 copies, $2.00 each; 21 or more, $1.00 each. Orders and checks (made payable to PRB) should be sent to: PRB, Circulation Department, P.O. Box 35012, Washington, DC, 20013 (PRB assists the Worldwatch Institute in the distribution of its papers).

Population Update

Estimated United States Population:

As of August 1, 1984	236,849,000
As of August 1, 1983	234,704,000

The above estimates include armed forces overseas and are from U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 958.

Estimated World Population:

As of January 1985	4,803,000,000
Annual Growth	82,000,000

Estimated by extrapolation of the mid-1984 population given on the 1984 World Population Data Sheet.

Latest Provisional Statistics for the U.S.: August 1984

	12 months ending with August					
	Number		Rate			
Item	1984	1983	1984	1983	1982	1981
Live births	3,638,000	3,678,000	15.5	15.8	16.0	15.9
Deaths	2,029,000	2,010,000	8.6	8.6	8.5	8.7
Natural increase	1,609,000	1,668,000	6.9	7.2	7.5	7.2
Marriages	2,454,000	2,473,000	10.4	10.6	10.6	10.6
Divorces	1,161,000	1,184,000	4.9	5.1	5.2	5.3
Infant deaths	39,000	40,400	10.7	11.0	11.4	11.9
Population base (in millions)	...	...	235.2	233.0	230.8	228.6

Note. Rates are given per 1,000 population, except for infant deaths, which are given per 1,000 live births. Rates are based on revised population estimates from the 1980 Census.

Source. Monthly Vital Statistics Report (Vol. 33, No. 8) from the National Center for Health Statistics.

LETTER TO THE EDITOR

To the Editor:

In the October 1984 issue of *Population Today,* I noted with interest the citation of ratios of births to deaths (times 100). This ratio is identical with what the biologist Raymond Pearl called the Vital Index. (See, for example, his *Introduction to Medical Biometry and Statistics,* Philadelphia: W.B. Saunders Company, 1930, pages 229-236.)

Pearl attributed an almost mystical value to this index, writing that "there is no other statistical constant which furnishes so adequate a picture as this of the net biologic status of a population as a whole at any given moment." To me, however, its usefulness is pretty much limited to situations where base populations are not available for computing the conventional rate of natural increase.

Sincerely,

Henry S. Shryock
Professorial Lecturer
Georgetown University
Department of Demography

POSITIONS/ PROFESSIONALS

Study Director, Committee on Population, National Research Council, Washington, D.C.: To direct and administer the activities of the Committee on Population, including coordination of the work by committee members on international and national projects, and providing technical inputs for committee reports. Qualifications include a PhD in a social science or equivalent training or experience in population studies, including demography, and approximately 15-18 years of professional experience, including the management of research projects. Experience should also include social science research methods, analysis of population program data, technical demography, and writing skills. In addition, experience in international population activities is preferred. Contact: Personnel Office, National Academy of Sciences, 2101 Constitution Ave., N.W., Washington, D.C. 20418.

TAKE A NUMBER. . .

A Puzzlement: A not-infrequent question that comes into PRB is the percent of females in less developed countries (LDCs) who are of childbearing age. The caller often expects that this statistic will show larger percentages of women in childbearing ages in LDCs than in developed countries, thereby partially explaining LDCs' rapid population growth. But it just doesn't work that way. LDCs may in fact have a lower proportion in those ages. Syria, for example, has 43 percent of females in the childbearing years (15-49) and Denmark has 48. This is in part because Syria's very high fertility itself increases the proportion of children in the country thereby lowering the share of other age groups. In fact those aged 0-14 outnumber those 15-49! There are differences, however, within the 15-49 age group. Here, the LDCs' younger age structure shows up with higher proportions in the more fertile years, 15-29.

Risky Business: One's chances for a successful marriage in the U.S. have decreased dramatically over the past few decades, according to new estimates by Thomas P. Espenshade of the Washington-based Urban Institute. In 1975-1980, the probability of a marriage ending in divorce was 0.45 for white females, meaning that nearly half of their marriages will eventually break up. It was slightly higher for first marriages (0.47) and lower for remarriages, but not by much (0.42). For black females, the likelihood of divorce was slightly higher.

This represents large increases in divorce probabilities over past years. In 1940-1945, only 15 percent of white females' first marriages were likely to end in divorce and only 7 percent of remarriages. Whatever variance there may be in Espenshade's estimates is more likely to be on the high than low side for the more recent time periods. These estimates must assume that marriages of 1975-1980, for example, will be subject to the same divorce risk in later years as were the earlier "marriage cohorts." At a time when divorce rates are generally rising, this assumption may prove conservative.

Here and There: The Statistical Centre of Iran has announced plans for a 1986 census. . .South Korea is proceeding with the installation of 16 digital "population clocks" in 12 cities showing second-by-second population change. . .the decline of the U.S. farm population may have stopped in 1983, according to the Census Bureau, although the amount of change in the survey is not statistically significant. . .the Census Bureau has released a new series of state population estimates for 1970-1983 which give consistent time series, including an adjustment for the unusually large "error of closure" between the 1970 and 1980 censuses *(Current Population Reports,* Series P-25, No. 957). . .the Census Bureau measures many things, including how much homework gets done. In 1983, girls did more than boys, 5.7 hours per week vs. 5.2; private high school students did 14.2 hours per week, public, 6.5;
blacks did more homework than whites at every level, whether public or private, and Hispanic students in private schools did more homework than anyone, 14.5 hours per week

. . .addenda

And Now, Superdemographics: Demography has cracked the final barrier—acceptance by Hollywood! In one of this season's blockbuster movies, *Supergirl,* the heroine is seen attending math class as a schoolgirl. The teacher gives his students a problem to be solved at their computer terminals: Given the current family size and length of life in China, what will be China's population in 2040? Supergirl's attention, however, is elsewhere and the teacher calls upon her for the answer. But S-girl needs no computer. Making a smooth recovery, she instantly calculates the precise number: five billion, two hundred and seventy-one million, nine thousand—and ten. While Supergirl's projection may seen a tad higher than the UN's medium variant, at least she ended with a zero (to indicate it's just a projection?).

CURRENT READINGS

PRB welcomes materials on population topics for possible inclusion in Current Readings. Publishers may address review copies to Book Review Editor, POPULATION TODAY, Population Reference Bureau, 2213 M St., N.W., Washington, D.C. 20037.

POPULATION AND SURVIVAL: The Challenge in Five Countries, by Georgia Lee Kangas. New York: Praeger, 1984. 249 pages. ISBN 0-03-071871-6

This ambitious book boils down the historical, religious, economic, cultural, and political conditions in India, the Philippines, Egypt, Bangladesh, and Mexico in an attempt to demonstrate the understanding needed to develop a sound population policy. The chapters focus on the most important aspects of each culture that influence the "population prognosis." Factors such as public health or the status of women are discussed insofar as they affect population.

The author qualifies her pro-family-planning stance by emphasizing the need for a profound knowledge of the cultural and historical setting of a particular country. Each country, she argues, should set goals for population stabilization but strive to reach those goals in the least disruptive way.

Each section at once sketches the "big picture" which requires government action, and regales the reader with cultural details which check that response. This would be a marvelous accompaniment to figures on fertility and mortality for the demographer who is unfamiliar with each country.

—Margaret Greene

REFLECTIONS ON POPULATION, by Rafael M. Salas. New York: Pergamon Press, 1984. 237 pages. ISBN 0-08-031588-7. $30.00.

Salas, the Executive Director of the UNFPA and Under-Secretary-General of the United Nations (who served as Secretary-General of the International Conference on Population in Mexico City), wrote his *Reflections on Population* as a sequel to his *International Population Assistance: The First Decade*, published in 1979. The aim of the book is to characterize the work of the UNFPA with the developing countries up to 1984 and to relate these experiences to the issues before the Mexico City Conference.

The first chapter offers an overview of the significant developments in the field up to 1984, and the last chapter, Salas' reflections on the future of population assistance. The heart of the book lies in the remaining five chapters. Each covers a specific population-related topic, such as Chapter 2, "Fertility, Status of Women, and the Family." The individual chapters follow a set format: a short opening introduction, extracts from Salas' policy statements on behalf of the UNFPA (the bulk of the chapter), and a final section entitled "Issues for the Future." In addition, the two appendices contain the five State of the World Population Reports of 1980-1984 and seven regionally focused population statements in their entirety.

The book offers plenty of commentary, and would prove particularly useful to those writers interested in compiling meaty population quotations: each of the excerpt sections provides quotable Salas statements, both long and short, on many aspects of this always complex and diverse field.

—Janine Adams

LABOR IMMIGRATION UNDER CAPITALISM: Asian Workers in the United States before World War II, edited by Lucie Cheng and Edna Bonacich. Berkeley: Univ. of California Press, 1984. 634 pages. ISBN 0-520-04829-5

This book of 17 essays is a fascinating account of Asian immigration into the U.S. from its inception in the 1850s up to World War II. The book covers the five major Asian groups that contributed to U.S. immigration: Chinese, Japanese, Koreans, Indians and Filipinos. The editors view the subject from a Marxist perspective, describing first the development of U.S. capitalism in the context of Asian immigration; second, Asian countries in context of political/economic causes for emigration to the U.S.; and finally, the Asian immigrants themselves. The chapters on socioeconomic groups are arranged in order of arrival, e.g., Chinese Prostitutes in 19th-Century America, Japanese Gardeners, Agricultural Workers in California, etc.

The authors' approach is that processes underlying international labor migration grow out of the logic of capitalist development. Extremely well written and documented, the book offers an approach that, Marxist or not, provides many perceptions on this aspect of American population history.

—Alex von Cube

COUNTRIES OF THE WORLD AND THEIR LEADERS YEARBOOK: 1985. Detroit: Gale Research, 1984. ISBN 0-8103-162-2809. $95.00 per set.

This two-volume set provides in-depth country profiles for 168 nations, examining the people, geography, history, economy, government, education, and foreign relations of each country. While principally a compilation of U.S. State Dept. data, *Countries of the World* is useful because of the variety and depth of its information—it includes everything from vital statistics to Who's Who in governments, health tips, and a climatological wrapup.

—Anthony Agresta

PUBLICATIONS RECEIVED

BHUTAN: Development in a Himalayan Kingdom. A World Bank Country Study. Washington, D.C.: World Bank, 1984. 177 pages.

EFFECTS OF CHILDHOOD FAMILY STRUCTURE ON MARRIAGE, by Frances E. Kobrin and Linda J. Waite. Santa Monica,Calif.: Rand Corp., 1984. 23 pages.

FARM POPULATION OF THE UNITED STATES: 1983 (Current Population Reports P-27, No. 57), Washington, D.C.: Bureau of the Census, 1984. 35 pages.

FROM BLACK MUSLIMS TO MUSLIMS: The Transition from Separatism to Islam, 1930-1980, by Clifton E. Marsh. Metuchen, N.J.: Scarecrow Press, 1984. 149 pages.

HUNGARY: Economic Developments and Reforms. A World Bank Country Study. Washington, D.C.: World Bank, 1984. 232 pages.

IPPF PLAN 1985-87. London: International Planned Parenthood Federation, 1984. 26 pages.

MALE INVOLVEMENT IN FAMILY PLANNING, by IPPF Staff. London: International Planned Parenthood Federation. 1984. 47 pages.

PHILIPPINES AND TAIWAN, by Susan De Vos. Honolulu: East-West Population Institute, 1984. 72 pages. $3.00.

POPULATION OF JAPAN: Country Monograph Series no. 11, by the Economic and Social Commission for Asia and the Pacific. New York: United Nations, 1984. 345 pages.

A PROFILE OF HAWAII'S ELDERLY POPULATION, by Eleanor C. Nordyke, et al. Honolulu: East-West Population Institute, 1984. 39 pages. $3.00.

RURAL DEVELOPMENT: Putting the Last First, by Robert Chambers. New York: Longman, 1984. 246 pages. $5.95.

SOCIO-ECONOMIC DEVELOPMENT AND DECREASED FERTILITY IN COLOMBIA, by the Dept. of International Economic Affairs. New York: United Nations, 1984. 47 pages.

SPOTLIGHT

SRI LANKA

Population, 1984 (est.): 16.1 million
Population per sq. mile (1984): 636
Births per 1,000 pop. (1982): 27
Deaths per 1,000 pop. (1981): 6
Infant mortality rate, (1980): 34.4 infant deaths per 1,000 live births
Rate of natural increase (1982): 2.1 percent
Area: 25,332 sq. miles (about the size of West Virginia)
Major exports (1981): tea, rubber — $1.1 billion
Major imports (1981): food, petroleum, fertilizer — $1.8 billion
GNP per capita (1982): $320

The Republic of Sri Lanka (formerly Ceylon and, before that, Serendip) is a teardrop-shaped island nation located off the southeastern coast of India. Inland waters comprise 370 of Sri Lanka's 25,332 square miles; there is a mountainous south-central area, an upland belt, and a flat coastal plain which occupies the majority of the island. Sri Lanka gained its independence from Britain in 1948 through a process of peaceful constitutional evolution and is a sovereign, democratic republic.

Sri Lanka's 1984 population was about 16.1 milllon. Its population density per hectare of arable land is the sixth highest of any country in the world, though it is not very uniform. Population density is about 636 persons per square mile, but about two-thirds of the country's population is concentrated in the wet zone in the southwestern and central part of the country, which covers only 23 percent of the total land area. At the time of the 1981 Census, 22.6 percent of the total population was urban.

Sri Lanka's population increased for many years at an average annual rate of 2.5 percent, climbing to 2.8 percent in some years. Since 1970, however, there has been a reduction in the rate of population growth, down to about 1.7 percent in 1980, due to a decline in birth rates and some emigration. Sri Lanka's 1963 total fertility rate of 5.0 children per woman declined to about 3.4 in 1974, although it appears to have risen somewhat to 3.7 since, due to an increase in the number of marriages.

Given the present fertility levels and patterns of family formation, the population of Sri Lanka is still likely to increase rapidly in the future. However, in recent years fertility in Sri Lanka has declined because of certain changes in women's behavior: Women who marry are doing so at a later age, more women in peak reproductive years are remaining unmarried, and married couples are having fewer children. These changes, in turn, are traced to improvements in education, and, to some extent, unemployment.

The dowry system and higher economic and social aspirations among both males and females also have an effect on marriage age. In Sri Lanka it is customary for a girl's parents to provide a dowry as a measure of security when she marries. While the amount of the dowry is increasing, the income level of the majority, who cannot afford to provide dowries for the daughters, is still below subsistence level. Though the dowry system has a negative effect on the status of women, it might be one reason for the rising age at marriage and the decline in the proportion of younger married females.

World Bank photo by Tomas Sennett

Rice production is important in densely populated Sri Lanka.

Ethnically, about 72 percent of the population are Sinhalese, 20 percent are Tamil, and 8 percent are other minorities, including Muslims, Burghers, Malays, and Vidhas. At present, racial tensions between Tamils and Sinhalese have resulted in unfortunate outbreaks of violence. Sri Lanka's level of literacy, 85 percent, is high for a developing country.

Sri Lanka's economy is predominantly agricultural, with manufacturing accounting for only 15 percent of the GNP. Tea, rubber, and coconut are the leading export products. Food, drugs, other consumer items, intermediate products, and investment goods are its chief import products. A strong inflow of foreign aid has helped Sri Lanka cope with foreign exchange problems and food deficits, and to develop investments.

Sri Lanka was among the first countries in Asia to recognize the relationship between population dynamics and socioeconomic development, and the need for policies and programs aimed at moderating population growth rates as well as achieving an equitable internal distribution of the population. The national government has adopted a clear policy of population redistribution that calls for channeling the main flow of population towards the country's dry zone. The government has also been aware of the potential problems of unrestrained population growth. The country's leaders have consistently recognized the need for adoption of policies, and there has been a substantial input of foreign funds into the family planning program of Sri Lanka. □

PT again thanks Mohammed Nazrul Hoque, a doctoral candidate from Bangladesh at Penn State for his assistance in preparing a "Spotlight."

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Australia Information Service photo by John McKinnon

A herd of cormo wethers, dogs and shepherd. What's up Down Under? See *PT*'s "Spotlight" on Australia, page 12.

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Population and Development: Challenging the Consensus

One of the basic premises of U.S. international population assistance programs—that slower population growth is beneficial to social and economic development in the Third World—is being questioned by scholars and public officials in the United States. This challenge to what many had accepted as conventional wisdom comes just as many developing country leaders have agreed that slower population growth is necessary for their countries to achieve more rapid economic development—a position reflected in resolutions at the International Conference on Population (ICP) in Mexico City last August.

Rafael M. Salas

Widespread public attention was first drawn to dissenting views in the U.S., during the summer of 1984, when a draft version of the U.S. position paper for the Mexico City meeting was circulated with statements that "the relation between population growth and economic development is not a negative one" and that "in the American experience and in the economic history of most advanced nations, population growth has been an essential element in economic progress." At the ICP the U.S. delegation pushed free enterprise as the key to economic development.

Dissenters and Revisionists

Articulation of dissenting views continued at a recent session titled "Are World Population Trends a Problem?" sponsored by the American Enterprise Institute in Washington, D.C. as part of its Public Policy Week. This annual event attracts distinguished public figures, businessmen and women, and specialists from a variety of fields. The population program included formal presentations by Rafael Salas, Director of the UN Fund for Population Activities; Samuel Preston, President of the Population Association of America (PAA) and co-author of a forthcoming report on population and development relations for the National Academy of Sciences; and Lord Peter Bauer, of the London School of Economics and a well-known critic of conventional views on a wide range of development topics. A panel representing various points of view on population policy commented on the papers.

Preston argued against resorting to the negative effects of population increase as a rationale for most existing national and international population programs. Instead he cited these programs' cost-effectiveness, their positive effects on individual and family welfare, and their contribution to balancing individual and societal interests as reasons for his support of them. Preston went on to say that rapid population growth in most times and places is a relatively minor factor in reducing per capita income and other indicators of welfare, and that most available evidence suggests that while demographic factors affect the accumulation of physical and human capital, their impact is weak. He concluded by noting the risks involved in basing population programs on such shaky ground.

In his paper, Lord Bauer presented a frontal attack on population

Continued on page 8

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Population Pressures Intensify In Sub-Saharan Africa

The population of sub-Saharan Africa's 42 nations, estimated by the United Nations at 434 million as of mid-1984, is likely to more than triple to 1.4 billion in the next 40 years. Annual growth is now about 3.1 percent—up from 2.5 percent in the 1960s—and rising. Birth rates are collectively the world's highest at an average 48 per 1,000 population and show no signs of falling, while death rates averaging 17 per 1,000 *are* falling.

Though not the only cause, this tremendous population growth is a key factor in the food crisis that now has the world's attention focused on Africa, says Thomas Goliber in PRB's February 1985 *Bulletin*, "Sub-Saharan Africa: Population Pressures on Development." It is also braking the region's efforts to catch up with the demand for jobs, education, and health services, and cope with exploding cities.

Goliber adds a hopeful note, saying that the climate for policies to reduce population growth as an aid to development is changing "perceptibly." Africans have shunned such policies in part because many viewed them as a Western tactic to gloss over inequalities in the world economic order which they considered the real root of the region's poverty and slow development. As late as 1982, family planning "effort" in the different countries was graded "weak" to "none" in a listing prepared for the World Bank.

Turning to Family Planning

Now government heads like Major General Buhari of Nigeria (the region's population giant at an estimated 92 million in 1984) are leaning more strongly toward programs to reduce population growth, and family planning was stressed in the Kilimanjaro Programme of Action on Population endorsed by 36 of the nations in January 1984. By mid-1984, at least 13 of the 42 nations supported public and/or private family planning services explicitly to reduce fertility; 26 in all provided some direct government services.

Though triggered by drought, sub-Saharan Africa's current food crisis has been brewing for two decades,

World Bank photo by Ray Witlin

Explosive livestock increase, spurred by human population growth, is turning 24,000 square miles of African land into desert each year.

Goliber observes. Per capita food production has been declining since the 1960s, due to a combination of rapid population growth, land degradation, political upheavals, and government policies which give short shrift to farmers. This in turn has contributed to a decline in per capita income in the 1980s, although the regional per capita GNP in 1983, $595, was still more than double the $260 regional average for Bangladesh, India, Nepal, Pakistan, and Sri Lanka, according to World Bank estimates.

The economic slowdown is likely to retard the gains in school enrollment and life expectancy that African nations have registered since independence in the early 1960s, despite rapid population growth. Potentially the region's most explosive issue, Goliber argues, is the growing gap between the number of primary school graduates and jobs available in the modern sector which such graduates came to expect during the colonial era.

Recent surveys in 10 of the region's countries conducted as part of the World Fertillty Survey (WFS) indicate that most African women want a family even larger than the current total fertility rate of well over six births per woman. Reducing that desired family size will take a sharp cut in deaths to children under age five, which currently account for half the annual deaths in most of the countries, and more educational and economic opportunities for women in particular, Goliber says.

The Next Generations

He is not optimistic that large numbers of African women will adopt modern contraception in the 1980s; the highest proportion of married women of childbearing age using modern contraception found in the WFS surveys was 6 percent, in Ghana. But family planning programs to distribute modern methods, now being adapted to the special needs of sub-Saharan Africa's still overwhelmingly poor and rural population, can meet the demand when it arises. Goliber sees this as likely to emerge first among the second and third

Continued next page

Vietnam Invokes Birth Penalties

Dissatisfied with their country's progress in stemming rapid population growth, Vietnamese authorities have decided to supplement family planning propaganda with penalties, mostly economic.

Vietnam's population of over 58 million, ranked 13th among the world's countries, continues to grow at a rate of about 2.4 percent annually. The 1.3 million babies added to the population every year force Vietnam to provide an extra 400,000 tons of food annually to maintain current food levels. Seeing a need for stringent family planning and reluctance on the part of the citizens to comply. Vietnamese authorities plan to institute incentives, or rather, disincentives, to encourage family limitation. The "recommended" maximum number of children per family is two; families exceeding this number will forfeit their chances of becoming "elite workers" as well as all bonuses and chances for promotion.

In addition, in some parts of the country, couples who have three children risk losing their jobs; in other places such families can be deprived of permission to live in urban areas, forcing them into internal exile in the countryside. □

FROM THE EDITOR'S DESK

The most provocative piece of population journalism in some time is surely Michael Weisskopf's reportage on China's one-child population program, which appeared in a recent *Washington Post* series (Jan. 6-8, 1985).

Weisskopf, former Beijing correspondent for the *Post*, describes in detail the ongoing conflict between government pressure to limit births and couples who want more children—the government puts in IUDs, free-enterprise "hook wielders" remove them; government inspectors require sterilizations, the couples come up with forged sterilization certificates. Whether or not the one-child family has resulted in increased female infanticide—a crime in China—(it may or may not be a spotty phenomenon), there's no question that pressure to conform to China's present childbearing policy can be harrowing. (Early in 1984 possible softening of the one-child policy was hinted at in the Chinese press—see *PT*, May 1984.)

Remember when China was pronatalist? It was, during the 1950s. Since then, however, looming projections have spurred increasingly rigorous population programs (late marriage, the two-child family), each one touted as the cure-all. Now, other less developed countries are becoming convinced that the fantastic population projections on their calculators are for real. Like it or not, the kind of headlines seen in the *Post* series are liable to become more common (see Vietnam on preceding page, for example).

—Art Haupt

Population Pressures

From preceding page

generations of urban dwellers, who are increasing twice as fast as national populations as a whole, and among daughters of the women now receiving some primary school education for the first time.

Goliber has traveled widely in sub-Saharan Africa and worked closely with political leaders and technical experts in the region since 1979 when he joined the consulting firm, The Futures Group, in Washington, D.C., to work on the USAID-sponsored project Resources for the Awareness of Population Impacts on Development (RAPID). □

Copies of the 46-page *Population Bulletin*, "Sub-Saharan Africa: Population Pressures on Development" (Vol. 40, No. 1) can be ordered from the Population Reference Bureau for $4.00 each; 2-10 copies, $3.00 each; 11-50 copies, $2.50 each; over 50, $2.00 each. Handling charges, inside the U.S., add $1.00 to each order; outside the U.S., add 25 percent of cost of *Bulletins* ordered. Send order and remittance to PRB, Circulation Dept., P.O. Box 35012, Washington, D.C. 20013.

U.S. Ends Aid to IPPF

On Dec. 11, the collision finally occurred between an irresistable force and an immovable object. The U.S. Agency for International Development announced it would stop funding the International Planned Parenthood Federation because of IPPF support of member organizations' abortion activities.

Said the AID statement: "Under U.S. policy outlined at the International Conference on Population (ICP) in 1984, the United States will no longer contribute to separate nongovernmental organizations which perform or actively promote abortion as a method of family planning in other nations." This proscription marks a tightening of the U.S.'s decade-long policy against abortion providers. Previously, AID had required that nongovernmental family planning groups keep U.S. funds in segregated accounts. (Under 1973 U.S. law, government funding itself cannot be used to promote abortion.)

The AID announcement also marked a broad interpretation of what constitutes abortion promotion. "The IPPF has not in the past, and does not now, perform or actively promote abortion as a method of family planning in other nations," wrote IPPF Secretary General Bradman Weerakoon in a letter to AID Director M. Peter McPherson. What was in dispute, rather, was IPPF's allocation of some 0.5 percent of its annual budget (presently about $52 million) to support abortion-related activities (not abortion services per se) such as conferences, medical research, treatment of abortion medical cases.

IPPF felt its responsibility to the family planning organizations within its federation precluded it from altering its policies to meet U.S. requirements. The U.S. contribution had been expected to amount to about $17 million (FY 1985)—nearly one-third of the total IPPF budget.

The week before the AID announcement was made, in anticipation of AID's decision, IPPF had announced that it was cutting its budget by 30 percent, and would close some field clinics and cut grants to national family planning groups. IPPF's Central Committee was planning to meet in late January 1985 to further consider the funding problem and policy situation.

At the ICP, held in Mexico City in August 1984, U.S. Amb. James Buckley stated that were the U.S. to withhold funds from any organization under its new policy, it would seek ways to ensure that those same funds wound up used for family planning programs. At the beginning of 1985, this alternative remained to be worked out. □

SURVEY REPORT

East Java

Results of a longitudinal population survey in East Java, Indonesia, have been published by the government of that Southeast Asian country in cooperation with POPLABS of Chapel Hill, N.C.

Although accounting for only 20 percent of a national population of 161 million, this eastern edge of Indonesia's primary island is one of the most densely populated areas in the world, with 600 persons per square mile.

Continued next page

East Java

From preceding page

About 80 percent of the people live in small rural villages. Although (or perhaps because) this area has historically had lower fertility and population growth rates than the rest of Indonesia, East Java was selected as a primary target for resources and efforts of the national family planning program in the early 1970s. This special attention paid off, and East Java became a showplace of a national program which has itself been proclaimed an international "success story."

The two-year population study, begun in 1980, was designed to provide estimates of fertility, mortality, and contraceptive use to evaluate the family planning program there and to monitor trends since 1970. Recent population trends are of particular interest after the 1980 Indonesia Census surprised many analysts by "finding" 5 million more people than predicted.

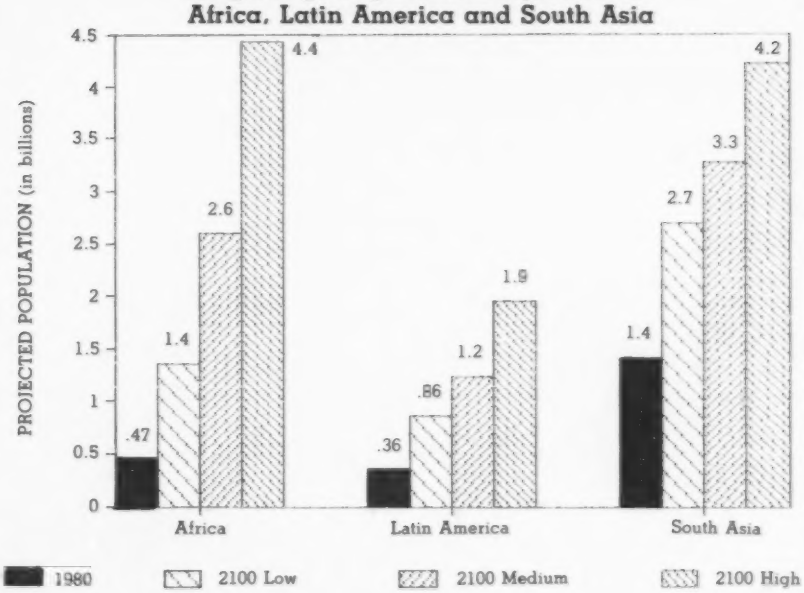
The survey results confirmed a dramatic decline in fertility since 1970. The total fertility rate (TFR), or average number of children per woman, fell 40 percent over the decade, from 5 to 3 children. These rates compare well with the 1976 World Fertility Survey TFR of 4.3 for Java and Bali.

There were marked urban/rural differences in the infant mortality rates (IMR) recorded, with an IMR of 44.6 in the cities and 74.9 in the countryside, although both were lower than the national rate of 92 infant deaths per 1,000 live births for all Indonesia.

Family planning data from the two rounds of the survey revealed the expected increase from the 1976 WFS contraceptive use rate for East Java of 31 percent, but there were also some surprises. The percent of married women using birth control declined from 42 to 39 percent between 1979 and 1980-1981. Erosion in use of the pill among women of all ages accounts for this difference. In addition, this island is somewhat of an anomaly: in most countries, contraceptive use is higher in the cities, but in East Java this rate is 4 percentage points lower in urban than in rural areas. This may be a result of the structure of the national family planning program, which relies upon a community-based distribution of contraceptives, a system less effective in large cities than in the more socially cohesive villages. □

SPEAKING GRAPHICALLY

Long-Range Population Projections for Africa, Latin America and South Asia



This graph shows a rather dramatic example of just how greatly projections of the populations of the world's regions can vary, depending upon the assumptions. For all three regions depicted above, the United Nations projections were run with varying assumptions on just when their fertility might decrease to the "two-child family" level required to achieve the ultimate stabilization of population size. For Africa, the low projection assumes the replacement level would be achieved in 2030; the high, in 2065.

What's a little three-and-one-half decade difference between friends? Quite a lot, actually: if the two-child family is achieved 35 years later in Africa, about 3 billion people more! For Latin America, the low assumption is 2025 and the high, 2060 (and 1 billion more people); for South Asia, it is 2010 and 2040, respectively (and 1.5 billion more).

Source: 1980 Assessment of the UN Population Division.

Midwest Bottoms Out

Several Midwest states, which had been undergoing difficult economic times and losing population began slowly gaining again during 1984, according to U.S. Census Bureau estimates. Ohio, Indiana, Michigan, and Iowa experienced small population increases from July 1983 to July 1984; despite these increases, all but Indiana had smaller populations in 1984 than in 1980. Even the District of Columbia has arrested its decline, stabilizing at 623,000 in mid-1984.

By contrast, some energy-producing states, West Virginia, Oklahoma, and Wyoming, experienced population declines. And Texas, which, along with California, had been a major gainer until recently saw its growth rate drop sharply. Texas had been swelling by half a million per year, but grew by only 200,000 in 1983-1984, indicating that most of Texas's growth was due to natural increase (births minus deaths) rather than migration. (Note: As reported in *PT* in Dec., the Census Bureau has changed the name of the former North Central Region to "Midwest." Within it, old East North Central and West North Central divisions remain, however. "East Midwest," and "West Midwest" don't quite make it, do they? □

DEMOGRAPHER'S

1980 Rates of Emigration to the United States

by Morton D. Winsberg

The volume and origin of immigrants into the United States has been much examined in recent years in terms of the impact of the immigrants on the social and economic lives of Americans. Less well known is the impact of emigration to the U.S. on the population of the nations from which the emigrants depart.

The table on the opposite page shows the rate of legal immigration to the U.S. per million inhabitants of the emigrant nation for 1980. Since the true number of illegal immigrants into the U.S. cannot be documented, the actual rates are undoubtedly higher than those shown here for some countries. Nevertheless,the table presents an unusual perspective on the effect of U.S. immigration policy.

In 1980, for every 1 million world inhabitants, the United States accepted 118 immigrants. This acceptance rate is low compared with those in years during the last century when the number of immigrants to this then relatively unpopulous nation was large. In four years during the period 1880 to 1915 the rate rose above 600. Indeed, in 1907 it exceeded 700. The rate rose above 200 for the last time in 1924, and in most years since then it has been below 100. During the decade of the 1970s, however, it began to rise once more, and has been above 100 since 1977.

Prolific Senders

Though the acceptance rate for the world as a whole may seem low, the reader should note that a number of countries greatly exceeded that rate, some with rates in the thousands. The table reveals, for example, that the rate for Antigua in 1980 was 11,558 per million inhabitants; in other words, in one year on the average, over 1 percent of Antigua's population emigrated to the U.S.

Perspective on the 1980 rates can be gained by a look at emigration rates through history. In the 19th century, during their peak decades of migration to the U.S., Ireland and Norway contributed a larger share of their populations to the U.S. than any other nations. In Ireland, during the 10 years following the potato famine, there was a mass exodus in which the annual rate of emigration to the U.S. normally exceeded 20,000 people per million inhabitants, nearly reaching 30,000 in 1851. In Norway during the 1880s, as a result of a rapidly growing rural population compounded by a period of low farm commodity prices, the rates averaged nearly 10,000 per year, rising to nearly 16,000 in 1882.

By contrast, in 1980 the countries most likely to send large proportions of their populations to the U.S. were small, densely populated nations, often English-speaking former island colonies near the U.S. These included the Caribbean island nations of Antigua, Barbados, Dominica, Grenada, Jamaica, St. Lucia and St. Vincent, and the mainland Western Hemisphere former British colonies of Belize and Guyana. All had emigration rates to the U.S. in 1980 which exceeded 6,000. For the past 15 years, the rates for these countries have been among the highest in the world. The case of Puerto Rico, which averaged approximately 7,000 annually for the past two decades, demonstrates that a rate of 6,000 or more (if sustained for a prolonged period) can provide tangible relief to the economy of a nation. It is widely acknowledged that employment opportunities for its citizens in the U.S. have been a major benefit to Puerto Rico's economy.

No Safety Valve

Since high rates are a function of a small population base, few nations with large populations in 1980 had high rates of emigration to the U.S. For those countries with populations larger than 20 million, only Canada, Korea, Mexico, the Philippines, and Vietnam had rates greater than 500. Also, those nations which had high rates in the 19th century did not maintain them into the late 20th century. In Europe, only Portugal, Greece, and Iceland have rates that exceed 400. Most other European countries have rates below the world average of 118.

As a way of significantly lessening population pressures, emigration to the U.S. can benefit only nations with small populations and even then the emigration must be sustained. Mexico's population, for example, is currently growing at over 2 million people per year. If Mexico's rate of emigration to the U.S. were to reach the level of that of Norway in the late 19th century (or Puerto Rico today) immigrants from Mexico would number approximately 750,000 annually, far greater than the total legal immigration into the U.S. in 1980. □

PAGE

Morton D. Winsberg is a professor of geography at Florida State University in Tallahassee, Florida

Immigrants to the United States Per Million Population of the Emigrant Nation, 1980*

WORLD	118
Northern Africa	37
Algeria	9
Egypt	75
Libya	49
Morocco	23
Sudan	4
Tunisia	14
Western Africa	31
Benin	12
Cape Verde	2772
Gambia	37
Ghana	81
Guinea	3
Guinea-Bissau	11
Ivory Coast	3
Liberia	229
Mali	1
Mauritania	4
Niger	2
Nigeria	21
Senegal	13
Sierra Leone	75
Togo	4
Eastern Africa	24
Burundi	3
Comoros	3
Djibouti	14
Ethiopia	39
Kenya	38
Madagascar	2
Malawi	7
Mauritius	4
Mozambique	6
Reunion	4
Rwanda	2
Seychelles	254
Somalia	9
Tanzania	21
Uganda	27
Zambia	33
Zimbabwe	30
Middle Africa	6
Angola	24
Cameroon	6
Central African Rep.	1
Chad	1
Congo	8
Equatorial Guinea	33
Gabon	5
Zaire	2
Southern Africa	60
Botswana	6
Lesotho	5
Namibia	22
South Africa	66
Swaziland	22
Southwest Asia	194
Bahrain	86
Cyprus	491
Iraq	205
Israel	891
Jordan	1130
Kuwait	208
Lebanon	1631
Oman	24
Qatar	60
Saudi Arabia	14
Syria	201
Turkey	49
United Arab Emirates	29
Yemen, North	37
Yemen, South	137
Middle South Asia	40
Afghanistan	64
Bangladesh	7
Bhutan	8
India	31
Iran	258
Maldives	11
Nepal	6
Pakistan	52
Sri Lanka	28
Southeast Asia	296
Brunei	97
Burma	37
Cambodia	992
Indonesia	6
Laos	3175
Malaysia	58
Philippines	582
Singapore	145
Thailand	85
Vietnam	758
East Asia	55
China	26
Hong Kong	1028
Japan	34
Korea	793
Macao	1094
North America	533
Canada	533
Middle America	982
Belize	7870
Costa Rica	606
El Salvador	1333
Guatemala	482
Honduras	653
Mexico	999
Nicaragua	937
Panama	2045
Caribbean	2853
Antigua & Barbuda	11558
Bahamas	2767
Barbados	10068
Cuba	1426
Dominica	10476
Dominican Rep.	3045
Grenada	10168
Guadeloupe	179
Haiti	1213
Jamaica	9432
Martinique	112
Netherlands Antilles	1036
Puerto Rico	6243
Saint Lucia	8421
St. Vincent & the Gren.	6016
Trinidad & Tobago	4161
Tropical South Amer.	156
Bolivia	134
Brazil	13
Colombia	412
Ecuador	652
Guyana	9004
Paraguay	53
Peru	243
Suriname	250
Venezuela	60
Temperate South Amer.	138
Argentina	93
Chile	209
Uruguay	300
Northern Europe	219
Denmark	93
Finland	69
Iceland	759
Ireland	283
Norway	94
Sweden	94
United Kingdom	264
Western Europe	71
Austria	50
Belgium	43
France	33
Germany	105
Luxembourg	167
Netherlands	78
Switzerland	103
Eastern Europe	76
Bulgaria	19
Czechoslovakia	57
Hungary	70
Poland	132
Romania	82
Southern Europe	158
Albania	10
Greece	491
Italy	97
Malta	580
Portugal	759
Spain	49
Yugoslavia	94
USSR	28
Oceania	156
Australia	95
Fiji	1464
French Polynesia	265
New Zealand	215
Papua-New Guinea	3
Samoa, Western	2481
Solomon Islands	48
Vanuatu	45

*Three year average 1979-1981

Sources. Immigration and Naturalization Service Yearbook—1981 (1984); *1980 World Population Data Sheet*, Population Reference Bureau, Inc.

Population & Development

Continued from Page 2

programs. He said that "there is no case, on either moral or economic grounds, to induce or press Third World governments officially to promote population control." He decried coercive practices that have accompanied government intervention, and argued that such programs were unnecessary anyway because "Third World people know about birth control and have access to cheap contraceptives." Bauer said that population growth has little to do with economic development or underdevelopment. He cited the work of Julian Simon, who was also an AEI panel discussant, and during his commentary on the papers, Simon argued that population growth has had positive effects on economic development.

Salas based his remarks on the conclusions of the ICP in Mexico City, for which he served as Secretary-General. He reiterated the strong consensus among representatives at the Conference, and stressed the mutually reinforcing relationship between population and development variables as reflected in the Mexico meeting's first resolution, which stated that "social and economic development is a central factor in the solution of population and interrelated problems and that population factors are very important in development plans and strategies, and have a major impact on the attainment of development objectives." Salas also stressed that UNFPA, as a UN agency, was required to respect national sovereignty in the formulation and implementation of population policies.

Search for the Middle Ground

The debate that followed continued the focus on both the moral and economic justification for government intervention in the realm of individual reproductive practices. Differences of opinion were sharp. Bauer was asked whether he was aware of findings in the World Fertility Survey about unmet need for family planning services, and Simon was questioned on the applicability of his theory about the beneficial effects of rapid population increase in the current context of sub-Saharan Africa. In response to these questions, these two dissenters reiterated their previous stances.

Drawing on the paper which he wrote for PRB's Population Trends and Public Policy Series (see box at right), discussant Allen C. Kelley of Duke University suggested that a revisionist view of population and development interrelations has emerged which deemphasizes the direct influence of population growth on development and assigns it a role as an accomplice rather than villain (or hero) in the development story.

While the audience did not participate in the discussion, several of its members, including a number of individuals with considerable experience in the population field, expressed disappointment after the meeting. The dissenters, they said, could not recognize a middle ground between a single-minded view of rapid population growth as the only cause of underdevelopment versus equally strong assertions that population growth actually plays no role in aggravating developing country problems, such as food scarcity, employment, and provision of social services.

For some who had observed the deliberations in Mexico, the AEI debate focused so much on the extremes that it failed to recognize the balance that ICP delegates were able to strike between encouraging progress in slowing population growth in many LDCs and their sobering assessment of what had to be accomplished in the future. □

LETTER TO THE EDITOR

I read your accurate account of the death of the Simpson-Mazzoli bill in Conference Committee (*PT*, Nov. 1984), and I wish to add a couple of points. To begin with, I must question the assertion that had a Conference Report been adopted, passage "seemed unlikely." The House, I believe, would have approved the Conference Report, because those provisions which appeared to cause the close House vote in June (216-211), namely the sweeping amnesty proposal and the Panetta-Morrison guest-worker program, were significantly scaled back in Conference.

In terms of Hispanic voters flexing "their political muscles," you failed to mention that numerous scientific public opinion surveys showed a vast majority of Hispanic citizens favoring the key components of the Simpson-Mazzoli bill. While the Hispanic leadership opposed Simpson-Mazzoli, the great majority of Americans, including blacks, Hispanics, and whites did support this important and necessary measure.

Sincerely,

Casey Dinges
Public Affairs Director
The Environmental Fund

New Population Debate: Two Views on Population Growth and Economic Development, by World Bank economist Timothy King and Allen C. Kelley, professor of economics at Duke University. This 24-page issue of *Population Trends and Public Policy*, PRB's series for policymakers, explores the economic impact of rapid population growth in developing countries. The authors present different perspectives but agree on the fundamentals, rejecting alarmism about impending "population explosions" and the use of population growth as a scapegoat for all Third World ills. This *Trends* issue comes at a time when some policymakers are questioning the basic premises of U.S. population assistance. Together King's and Kelley's papers provide fresh insight into the renewed population debate. ($3.00 each, bulk discounts available from PRB.)

WORLD FOOD NEWS

The UN's Food and Agriculture Organization (FAO) is currently improving its program for the use of satellite remote sensing technology, desert locust control. The FAO Desert Locust Control Committee (with 50 nation members), has coordinated this strategy to combat the crop-threatening desert locust, in a potential 16 million sq. kilometer breeding area.

On the basis of the information gathered by the satellite data, an accurate assessment can be made of the ecological potential for desert locust population development at nation, regional, and interregional levels. At the field level, this information can be used to guide ground and aerial operations for surveillance and preventive control, reducing costly aircraft detection operations. Remote sensing techniques are also proving useful for monitoring and forecasting of other important migratory pests, such as the African migratory locust, *Quelea quelea*, African armyworm and red locust. □

World Food News is prepared by the North American Liaison Office of the Food and Agriculture Organization of the United Nations.

FAO photo by Studios du Sonissel

Locusts in the African desert.

JOHN ROCK (1890-1984)

John Rock, pioneer in fertility research, died Dec. 4. 1984, at the age of 94.

One of four doctors who developed the oral contraceptive during the 1950s, Dr. Rock began his career dealing with problems of infertility. He was the first scientist to fertilize a human egg in a test tube and he was one of the first to freeze human sperm cells without damaging their potency.

Dr. Rock, a committed Catholic, advocated a change in the church's stand against contraceptives and called for research into methods of contraception that would be acceptable to all religious faiths. (See his book, "The Time Has Come") However, he was never able to convince the Vatican that his oral contraceptives, which kept women from ovulating, were a form of natural birth control (and thus in keeping with the church's teachings).

During the 1960s, Dr. Rock testified before congressional committees and gave numerous lectures warning of the dangers of overpopulation and promoting contraception and birth control. □

Population Update

Estimated United States Population:

As of September 1, 1984	237,051,000
As of September 1, 1983	234,919,000

The above estimates include armed forces overseas and are from U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 961.

Estimated World Population:

As of February 1985	4,810,000,000
Annual Growth	82,000,000

Estimated by extrapolation of the mid-1984 population given on the 1984 World Population Data Sheet.

Latest Provisional Statistics for the U.S.: September 1984

	12 months ending with September					
	Number		Rate			
Item	1984	1983	1984	1983	1982	1981
Live births	3,655,000	3,675,000	15.5	15.8	15.9	15.9
Deaths	2,033,000	2,010,000	8.6	8.6	8.6	8.7
Natural increase	1,622,000	1,665,000	6.9	7.2	7.3	7.2
Marriages	2,466,000	2,472,000	10.5	10.6	10.7	10.6
Divorces	1,159,000	1,178,000	4.9	5.1	5.2	5.3
Infant deaths	38,900	40,200	10.6	10.9	11.4	11.9
Population base (in millions)	...	...	235.6	233.2	231.0	228.8

Note. Rates are given per 1,000 population, except for infant deaths, which are given per 1,000 live births. Rates are based on revised population estimates from the 1980 Census.

Source. Monthly Vital Statistics Report (Vol. 33, No. 9) from the National Center for Health Statistics.

NEW FROM PRB

Sierra Leone: A Demographic Focus, a 16-page booklet prepared by PRB and the National Population Commission of Sierra Leone. The booklet uses text, statistics, and graphs to summarize the population history, status, and dynamics of this sub-Saharan African country. Copies are available from PRB for $3.00 each.

The New Population Debate: Two Views on Population Growth and Economic Development, by Timothy King and Allen C. Kelley. Part of *Population Trends and Public Policy* series (see story, page 8).

Sub-Saharan Africa: Population Pressures on Development, by Thomas Goliber. *Population Bulletin* Vol. 40, No. 1 (see story page 3).

Order information: Orders of $20 and under must be prepaid and include $1.00 postage and handling. Send order and remittance to PRB, Circulation Dept., P.O. Box 35012, Washington, D.C. 20013 (checks payable to PRB).

FAO Publishes Popular Version of Food Study

The UN's Food and Agriculture Organization (FAO) has released a simplified version of its comprehensive study of the food production capacity of less developed countries (see Jan. *PT*, page 2). *Land, Food and People*, a 96-page report, is a readable condensation of the longer report and discusses topics such as allowances for food and nonfood needs in agriculture; climate; a plan for action (including obstacles for implementing that plan) and other topics. A color map showing "critical zones" is included along with a number of graphs and charts.

The report gives the essential conclusion of the landmark study and is an ideal course supplement for schools and universities.

For order information, contact UNIPUB, Inc., Box 433 Murray Hill Station, New York NY 10157 (212) 764-2791. □

TAKE A NUMBER . . .

Sinking fast: A number of European countries which had reported sharp drops in their crude birth rates (CBRs) for 1983 have now also reported total fertility rates (TFRs) that confirm the trend. At least two countries have CBRs (births per 1,000 population) below 10: Denmark and West Germany's rates of 9.9 and 9.7 are probably the first instances in history of single digit CBRs in countries with large populations. West Germany's TFR—or the number of children women are having on average—dipped dramatically after holding for several years at about 1.4 births per woman. It is now 1.32, almost certainly the lowest TFR ever recorded. Even France's TFR which had remained above or near 1.9 for years, dropped sharply in 1983 to 1.82. Denmark has not reported a TFR, but it could also be approaching 1.3, based on the CBR for 1983. One cannot help but speculate about some country someday breaking the TFR 1.0 barrier. . .

U.S. Cuban Decrease?: With the wide press coverage given to the U.S.'s rapidly increasing Hispanic population, it is difficult to associate the idea of a numerical decrease with any U.S. Hispanic population. But this is a possibility for the Cubans in the U.S. Their crude birth rate of 10.9 births per 1,000 Cuban population could be low enough to cause an excess of deaths over births in the not-too-distant future, particularly since the Cuban population is rather "old," with a median age of about 35. This is somewhat offset by immigration, but even that amounts to only about four or five thousand new arrivals annually.

Not So Equal: A disquieting fact came to light recently. Examining the U.S. mortality statistics, we noticed that the death rate in 1982 for the 65-69 year age group—24 deaths per 1,000 population—was very similar to the *total* death rate for many developing countries. Gambia, for example, has an estimated 28 deaths per 1,000 population. This means that the whole Gambian population, nearly half of which is below the age of 15, is subject to the same risk of dying as the U.S. elderly.

Here and There. . . the birth expectations of American women increased between 1982 and 1983 according to Census Bureau surveys. The number of children expected rose from 2,023 per 1,000 women to 2,079, a very slight increase but the first since 1976. . .Austria's population is again declining as of 1983, with 11.9 births per 1,000 population and 12.3 deaths. . . U.S. farmers as commuters: there's a growing trend for wage workers to live off the farm, 56 percent in 1983, according to the Census Bureau. . . Portugal reported a large birth rate drop in 1983, from 16.4 births per 1,000 population in 1980 to 14.4. . .

. . .addenda

drawing by Jimmy Margulies, Houston Post. Reprinted by permission.

CURRENT READINGS

PRB welcomes materials on population topics for possible inclusion in Current Readings. Publishers may address review copies to Book Review Editor, POPULATION TODAY, Population Reference Bureau, 2213 M St., N.W., Washington, D.C. 20037.

RURAL DEVELOPMENT IN CHINA, by Dwight Perkins and Shahid Yusuf. Baltimore, Md.: The Johns Hopkins University Press, 1984. 235 pages. $25.00. ISBN 0-8018-3261-6

In 1980, China in one stroke "made obsolete the informed speculation" on its agriculture by releasing detailed rural statistics in preparation for joining the World Bank. This readable and well-organized book is solidly founded on those statistics.

Mao believed China's agriculture could be transformed simply through the mobilization of its enormous labor force; separate agricultural and industrial development strategies have resulted in a dual economy. China uses mechanization in rural areas only when there is not enough labor. But it has demonstrated a commitment to giving the rural poor a large share of benefits in spite of the country's typical urban bias, resulting in a tremendous reduction in abject poverty. Rural communes and Party bureaucracy make for speedy national adoption of new agricultural methods, but are "administratively cumbersome." China's consideration of the incentive system, which led to increased production in the 1980s, raises a major question of economics versus politics—is the government willing to forgo some control for increased production?

—Margaret Greene

FAMILY AND WORK: Comparative Convergences, edited by Merlin B. Brinkerhoff. Westport, Conn.: Greenwood Press, 1984. 220 pages. $29.95.

This report examines the changes in traditional male/female familial and work roles in postindustrial society and the interdependence of these roles.

The book's first chapter presents an example of these changing roles: the wife of today who pursues a career in order to achieve self-fulfillment or to meet economic pressures, rather than (as in the past) to respond to her husband's inadequate filling of his role as breadwinner for the family. Brinkerhoff points out that in a two-career household it is most often the wife whose work situation is infringed upon by familial responsibilities, such as maternity leave or a sick child; while the husband is frequently expected to work long hours or take business trips, infringing upon his family role fulfillment.

Subsequent chapters concern the economic, social and gender influences on the work and family roles of postindustrial family members. The specific topics range from "Regional Differentiation, Intra-industry Division of Labor, and Family Labor Supply in Peru," to "Weak Links in Men's Worker-Earner Roles: A Descriptive Model."

This volume provides readable, clarifying treatment of a universal but confusing issue of today's society.

—Maria Matan

AMERICAN DEMOCRACY AND THE VATICAN: Population Growth and National Security, by Stephen D. Mumford. Amherst, N.Y.: The Humanist Press, 1984. 268 pages. $11.95 hardcover, $7.95 softcover. ISBN 1-931779-01-4.

The major thesis of this book is that demographic growth in the world, global security, and American strategic interests are part of the same continuum. According to Mumford, the world now faces a "nightmare" of overpopulation, which is a threat to our national security; and the Vatican, a sovereign power, has done a great deal to weaken the efforts of American leadership to deal with this threat. The Vatican's resistance to population control is formidable, says Mumford, and only the U.S. government is powerful enough to survive the necessary confrontation with the church.

Mumford charges that the church assisted with the "influx of tens of millions of illegal aliens" into the U.S. to counteract the results of diminishing fertility rates of Catholic women (page 104). The book also asserts that "since the days of Margaret Sanger, the church has ordered members to infiltrate population organizations to collect intelligence and undermine them from within (page 115)."

Mumford makes many such charges in the course of his argument. The already convinced will find in this book "documentation" for the suspicions they already have. Others will react to the author's statements with skepticism and a call for a closer match of attention-getting charges and facts.

—Conrad Taeuber

THE GREAT AMERICAN MAN SHORTAGE AND OTHER BLOCKS TO ROMANCE, by William Novak. New York: Bantam, 1984. $3.95 paper. (Originally published in hardback in 1983.)

While this self-help book primarily counsels both sexes how best to cope with romantic relationships, it also addresses at length the demographic dynamics of the real U.S. "man shortage," including the deficit of single men in various age groups and the effects of the age differential at marriage (especially when the older cohort is smaller due to population dynamics—marry younger men, Novak suggests). The gay factor and geographic sex differentials are briefly described. And there's light at the end of the tunnel, at least for women born in the post-baby boom era, who should now be encountering a large reserve pool of eligible older men.

—Art Haupt

PUBLICATIONS RECEIVED

AIDING THE DESPLAZADOS: The Complexity of Humanitarian Assistance, by John Mullaney. Washington, D.C.: The U.S. Committee For Refugees, 1984. 31 pages.

CUBANS IN THE UNITED STATES: A Bibliography for Research in the Social and Behavioral Sciences, 1960-1983, compiled by Lyn MacCorkle. Westport, Conn.: Greenwood Press, 1984, 227 pages.$35.00.

DEMOGRAPHY OF RACIAL AND ETHNIC MINORITIES IN THE UNITED STATES: An Annotated Bibliography with a Review Essay, by Jamshid A. Momeni. Westport, Conn.: Greenwood Press, 1984. 392 pages. $35.00.

ENQUETE NATIONALE SUR LA FE—CONDITE ET LA PLANIFICATION FAMILIALE AU MAROC 1979-80 (Vols. I-IV), [Morocco WFS] by the Institut International de Statistique. Rabat: Ministère de la Santé Publique, 1984.

IMMIGRATION POLICY AND THE AMERICAN LABOR FORCE, by Vernon M. Briggs, Jr. Baltimore, Md.: Johns Hopkins University Press, 1985. 294 pages.

THE PEOPLE OF SOUTH ASIA: the Biological Anthropology of India, Pakistan, and Nepal, edited by John R. Lukacs. New York: Plenum Press, 1984. 465 pages. $55.00.

POPULATION AND BIOLOGY: Bridge Between Disciplines, Proceedings of a Conference, edited by Nathan Keyfitz. Liege, Belgium: Ordina Editions. 300 pages. $25.00.

RACE AND ETHNIC RELATIONS: American and Global Perspectives, by Martin N. Marger. Belmont, Calif.: Wadsworth. 336 pages.

WOMEN IN THE WORLD-SYSTEM: Its Impact on Status and Fertility, by Kathryn B. Ward. New York: Praeger. 1984. 192 pages. $25.95.

WORLD HEALTH STATISTICS ANNUAL 1984. Geneva: World Health Organization, 1984. 385 pages.

SPOTLIGHT

AUSTRALIA

Population, 1984: 15,507,000
Aboriginal population, 1984 (est.): 200,000
Percent urban, 1984: 86
Births per 1,000 pop. (1983): 15.8
Deaths per 1,000 pop. (1983): 7.3
Infant mortality rate (1982): 10.3 infant deaths per 1,000 live births
Annual rate of population growth (1983): 1.1 percent
Area: 2,967,909 sq. miles (slightly smaller than the continental U.S.)
Major exports (1981): metal ores, meat, coal, wool, wheat
Major imports (1981): machinery, motor vehicles, chemicals
GNP per capita (1983): $10,780

by Alice T. Day

Australia, the world's sixth largest country in land area, has a population roughly the same size as that of the state of Texas. With nearly as many square miles as the continental U.S. and a population 1/15th as large, Australia has a geographic and demographic situation unique among industrialized nations. An island continent with 22,800 miles of coastline, it is a large, low-density, developed "European" country in a region of high-density, predominantly agricultural Asian nations.

Australia is a latecomer to the community of developed nations. Distance, meager and capricious rainfall, infertile soils, and rocky, often inaccessible coast originally made Australia seem unpromising as a land to settle and develop. In 1770, when Captain Cook first anchored there, the continent was inhabited by some 300,000 Aborigines living in small, scattered bands, for which 200 distinct languages have been identified. Through the end of the 18th century and the first half of the 19th, Britain sent her convicts to Australia to relieve the overcrowded English jails, and to provide new ports for British ships in Asia and the Pacific. From 1820, nonconvict immigration contributed substantially to total population growth. And the population of the new colony increased rapidly, as the non-Aboriginal population tripled in each decade from 1810 to 1860.

Whereas new settlement increased the white population, it contributed to the decline of the Aboriginal population. Contact with Europeans appears to have been fatal. From 1788 to the 1930s, the Aboriginal population is estimated to have fallen by more than two-thirds, to less than 67,000. Since then, it has increased again. The 1976 census recorded an Aboriginal population of 160,915, about 1.2 percent of the national total.

The most sparsely populated of all the developed nations, Australia has always been highly urbanized (86 percent of the population are urban dwellers). The population became concentrated early in a handful of cities along the eastern seaboard. In the three decades following World War II, Australia's population grew rapidly as a result of both immigration (40 percent) and natural increase (60 percent). Three out of four of the immigrants settled in the two largest cities, Sydney and Melbourne, creating difficulties in supplying water, sewerage, and other municipal services. Numerous attempts to develop the interior have failed, and the population remains distributed in a narrow band along the coastal fringe.

Australian Information Service photo by Eric Wadsworth

This Vietnamese refugee is one of a growing number of Asian immigrants in Australia.

Problems associated with rapid population growth became a matter of public debate in the late 1960s and early 1970s. From 1974 on, restrictions placed on immigration and a decline in the birth rate slowed the annual growth rate and, by 1983, it had almost halved to 1.1 percent (from the 1971 high of 2.1 percent).

After the war, Australia pledged "to assist persons in a refugee situation or those suffering substantial discrimination" in other countries. By 1981, Asian refugees and other migrants from Asia had increased from a fraction of a percent to 3 percent of the total population. However, the bulk of immigrants still hail from Europe. American-born settlers remain very few at 33,700, and Canadian-born are even fewer at 18,250.

Australia has been called the "lucky country." Apart from a few economic setbacks, the country prospered from the end of World War II until the onset of the 1974 recession. The land that had appeared arid and unproductive to 18th-century seafarers was found to be rich in metal ores and a good environment for raising sheep, cattle and wheat.

Australia must, however, face new social and economic realities brought on by job shortages, unequal distribution of economic opportunity, family instability, aging population, and extensive, and perhaps irreparable, damage to the country's ancient and fragile ecosystems. All these problems make it clear that Australia, though isolated by distance, is having to come to terms with the same consequences of population change that in 1985 affect the rest of the industrialized world. □

Alice T. Day is the 1984-1985 Visiting Scholar at PRB, a position made possible by the Mellon Foundation. She was previously with the Aging and Family Project, the Australian National University.